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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/107,787	06/30/1998	JOHN S. BUCHANAN	10000-1	8519

7590

04/01/2003

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EXAMINER

BUSHEY, CHARLES S

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 04/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/107,787

Applicant(s)

BUCHANAN ET AL.

Examiner

Scott Bushey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1 sht.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 20 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1).

Applicant should note that the liquid enters the cyclonic device from a tray located outside of the sidewalls of the device. The liquid collects on the tray until it reaches a level equal to the top end of the plenum or downcomer (7), at which time it flows downwardly through (7) to the lower end thereof wherein the liquid exits pipe (7) through the sidewall thereof near the bottom end of the cyclonic region. Applicant should also recognize that outlets (5) arranged in the sidewall of the cyclonic device are provided between the first set of spin devices (11) and the second set of spin devices (12), the second set of spin devices being arranged “substantially at

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the midpoint” of the cyclonic device and occupying about 15% of the elevation of the cyclonic device.

Instant claim 20 is a reinstatement of cancelled claim 11, as was pending and addressed in the previous Office action, mailed July 24, 2002. The following paragraph, which appeared in said previous Office action applies equally well to instant claim 20 as it did then to cancelled claim 11.

Applicant should note that the amended language of claim 11 (now cancelled and reinstated as current claim 20) is essentially equivalent to the language that has been replaced by the amendment. Specifically, claim 11 (now cancelled and reinstated as current claim 20) previously stated that the spin vanes were located “at about the midpoint” of the sidewall, while the amended language states that the spin vanes are located “substantially at the midpoint” of the sidewall. It is the Examiner’s position that “substantially” is as broad as “about”, especially when used to modify the term “midpoint”, which as defined by the 10th Edition of Merriam Webster’s Collegiate Dictionary as, “a point at or near the center or middle”. Clearly since the term being modified (midpoint), by definition is not an exact term, a none exact modifier (either about or substantially) cannot be expected to provide such a pinpoint definition to overcome a reference teaching such as that provided by Sheinman.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheinman.

Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1) as has been applied above substantially disclose applicant's invention as recited by instant claim 20, except for the spin vanes being located precisely at the midpoint. While the Examiner does not agree that the instant claim requires location of the spin vanes precisely at the center point between the ends of the sidewall of the device, it would have been obvious for an artisan at the time of the invention, to modify the location of the spin vanes (12) of Sheinman to be located at any location near to and including the precise center point between the ends of the sidewall of the device, since such would not appreciably modify the operation or purposeful function of the device. Applicant should note that the entire discussion as set forth in paragraph 2 above is incorporated herein by reference.

Response to Arguments

6. Applicant's arguments filed January 4, 2002 have been fully considered but they are not persuasive. Applicant's arguments as filed January 4, 2002 have been fully discussed and rebutted in the rejection statements above. It is noted that the amendment filed March 11, 2003

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has presented new claim 20, the only claim currently pending in the application, which claim 20 is identical to claim 11, as presented in the amendment filed January 4, 2002 and addressed in the Office action mailed on July 24, 2002. Applicant has elected not to present any new grounds of argument with the current amendment, and is relying solely on arguments of record, which were addressed in the Office action mailed July 24, 2002, which Office action has essentially been repeated herein.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (703) 308-3581. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on (703) 308-1972. The fax phone numbers for


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the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Scott Bushey
Primary Examiner
Art Unit 1724

csb
March 25, 2003


3-25-03